Work Orde September-11-13				*106	3867*						Page 1
Revision ID:	646.3718 Custom Washe	er		Accept	*N900	040 ′	100)* s	Setup Star	I VI	S1* S2*
	9/23/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:				1 4	. 12
Approvals:		n: <u>州</u> レブ	Date: <u> 3-09-\</u>	L Tooling: _ SPC (Y/N):		ate:		F	tun Star Stop		R1* R2*
Sequence ID/ Work Center ID)	Operation Description		Set Up/ Run Hours	Tool ID		Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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646.3700	A										
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Waterjet FLOW CNC Waterje	et	Memo 1-Cut as pe Dwg Rev:_ Prog Rev:_	A	0.00							13.11.
		2-Deburr if	necessary								
120		QC2- Inspect parts off r	nachine FAI/FAIB	0.00				20	-		1
120 QC		Memo		0.00				00	<i>O</i>		13:11.

Quality Control

											DQA:	Date	:
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						DISPOSITION			AGAINS"	— Г DE	PARTMENT/		
Work Orde	er:									_			
Part N	۱o		·- ·-			Rework Scrap		٨	Skid-tube Crosstube Machining Small Fall	۰Ľ	₹	Water Jet	Engineering Quality
NCR N	No			•		Use-as-is Work Order Update			oforming Finishing Large Fab Composite		Rec/Stor	e/Packaging Supplier	Other
Root					Descri	ption of work order update	ln	itial	Action		Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Chie	f Eng	Description		Date	Verification	QC Inspector
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	\vdash	entre No	t Concer	itric to	o/s	BOM/Route	\vdash	lardwai		\perp	Over/Under	<u> </u>	Temperature/Cure
	Н	racks			\perp	Broken/Damaged	-		on Incomplete	L	Part Incorred	├	Weld
	${f oxdot}$	rushed/0	Crimped			Burrs	-		ons Incomplete/Unclear	L	Part Lost/Mi	ssing	Wrong Stock Pulled
	\square^{c}	uffs				Contamination		Mainte	nance	L	Part Moved		
	l l	leat Trea	t			Countersink		∕lislabe	led		Positioned W	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

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Work Ord September-11-1					*	106	86	37*							Page	2
Item ID: Revision ID: Item Name:	646.3718 Custom Wasl	her		F	Accept		*1	1 900	040	100)*	Setup	Start Stop	1 🚺	S1* S2*	
Start Date: Required Date: Reference:	9/23/13	Start Qty: 20.00 Req'd Qty: 20.00		*20* *20*				Cust Item I Customer:	D:							
Approvals:		an:			Tooling SPC (Y				nte:			Run	Start Stop	171	R1* R2*	
Sequence ID/ Work Center I 130 *120* QC Quality Control	D	Operation Description QC8- Inspect parts - seco	nd check		Set U Run 0.00	Up/ Hours DAS 27 9-89	- - -	Tool ID	Tool #	Plan Code	Accept Qty	t Re Qt		Reject Number	Insp. Stamp	-
*140 *140 Outsource4 Outsource process -	Anodize	Outsource process-Anodi Memo Issue P/O to	ATG :	17 4.1.10.1 2 1915 Dwg 646.3700	0.00						Cc	£1	3/1.	1/06/	(Q)	
		2- PRIME A	S PER DWO	G, SEE NOTE #	2							4				
150 *150* Packaging		Receive & Inspect for Da	mage & Ma	t'l Certs	0.00						_/-	13/1	lyb.	2 (· ,

Packaging

												DQA:	D	ate:	
NCR:	Yes	/ No				WORK ORDER NON-C	COI	NFORM	MANCE / UF	PDATE					•
		**				r						QA Closed:	D	ate:	,-,,
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		:							·						
Root						ption of work order update	1	Initial		ction		Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Cr	nief Eng	Des	cription		Date	Verification	on_	QC Inspector
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		Bending				Bend		Grain				Ovalized			Pressure/Forced
		Centre N	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re			Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete			Part Incorred	ct		Weld
		Crushed/	Crimped			Burrs		Instruct	ions Incomplete	/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance			Part Moved			-
Ì		Heat Trea	at			Countersink		Mislabe	eled			Positioned V	Vrong		
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	1	ľ		Power Loss/	Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

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Work	Order	ID	106867
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106067

Page 3

	September-11-1.	3 11:47:34 A	M		IUNA	'							50
:	Item ID: Revision ID:	646.3718			Accept *	N900	040	100)* s	etup Sta		NS1	k
	Item Name:	Custom Wash	er							St	op 🛧	NS23	k
	Start Date:	9/23/13	Start Qty: 20.00	*20*		Cust Item I	D:						
	Required Date:	9/23/13	Req'd Qty: 20.00	*20*		Customer:							
	Reference:								r.	St.	art 🚣		
	Approvals:	Process Pla	an:	Date:	Tooling:	Da	ate:		r		••	NR1	*
		QC:		Date:	SPC (Y/N):	Da	ate:			St	op *	NR2	*
	Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours DAS	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Rejec Num		p
	160		QC5- Inspect part comple	eteness to step on W/O	0.00 27 9-89				· 🔨				
	1 AO QC Quality Control		Memo		0.00 13/11/2	75			20		<u></u>		
:													
k K	190		Identify as per dwg & Sto	ock Location: <u>ST5</u> 24	0.00				20	DAS	17 1	1-11	
	1QA Packaging Packaging		Memo ***IDENTIF REV***	FY AS PER APICAL MPP-	0.00 120 BY STAMPING THE P#	AND			<i>. 20</i>)	28 9-89	15-1	1-22	

QC21- Final Inspection - Work Order Release

0.00

200

Quality Control

0.00

Memo

NCR:	⁄es	/ No				WORK ORDER NON-	CO	NFORM	MANCE / UPDATE					
											QA Closed:	Da	te:	
Work Orde	er: _					DISPOSITION	_		_	_	PARTMENT		 1	
Part N	•					Rework Scrap Use-as-is Work Order Update		Thern	Machining Sma	istube all Fab ishing posite	4	Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root					Descri	ption of work order update		Initial	Action		Sign &		Т	·. · · .
Cause		Date	Step	Qty		or Non-conformance	Cł	nief Eng	Description		Date	Verificatio	n	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved							FALI	LT CATE	GORY					
Landi	ng G	Gear				General								
		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in	Crimped at n Strip in n Bend	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Instruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/Unclear nance led		Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct issing Vrong	V V	ressure/Forced emperature/Cure Veld Vrong Stock Pulled
		Torque W	Vaves in E	Extrusion	1 [Drawing		Out of 0	Calibration					

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

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Picklist Print

September-11-13 11:47:34 AM

Work Order ID:

106867

Parent Item:

646.3718

Parent Item Name:

Custom Washer

Start Date: 9/23/13

Required Date: 9/23/13

Page

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty		Date ssued	Status
M6061T6S.063 6061-T6 .063 Sheet		Purchased	No			110	sf	445.7105	0.0034	0.071578	A	13	. 11:05
·				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT021		445.7105							
				12	3135	120.2625							
				12	4003	72.113							į
				M	126075	253.335							

M127006 -> 1072

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	100	NFORM	MANCE / UP	DATE			
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Work Orde	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Ord	-			· · · · · · · · · · · · · · · · · · ·		Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
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Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Descr	ription	Date	Verification	QC Inspector
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	-	Bending			<u> </u>	Bend	\perp	Grain			Ovalized		Pressure/Forced
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	\vdash	Cracks			<u> </u>	Broken/Damaged		-	ion Incomplete		Part Incorre		Weld
		Crushed/	Crimped		L	Burrs	_	1	ions Incomplete/l	Jnclear	Part Lost/M	· _	Wrong Stock Pulled
		Cuffs				Contamination	L	Mainte			Part Moved		
		Heat Trea	at			Countersink	L	Mislabe	eled		Positioned \	Wrong	7
		Inspectio	n Strip in	Tube		Cut Too Short	1	Misread	d		Power Loss,	/Surge	Other

Offset

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish Folio

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DART AEROSPACE LTD	Work Order:	106867
And the second s	to the survey for the survey of the survey o	
Description: Custom washer	Part Number:	646.3718
Inspection Dwg: 646.3700 Rev: A		Page 1 of 1

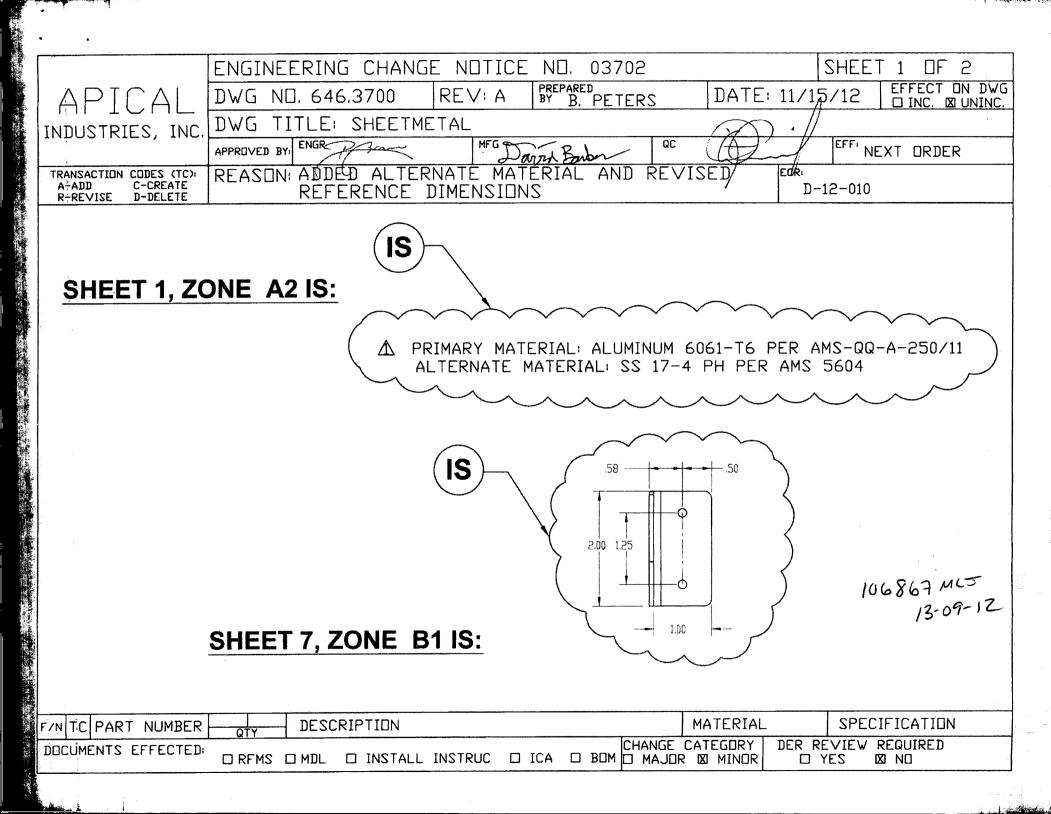
FIRST ARTICLE INSPECTION CHECKLIST

		AIXTIOEE III				Y
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Measured by: Ae
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ſ	Rev	Date	Change	Revised by	Approved
Γ	E	10.04.14	Added preliminary approval	KJ	

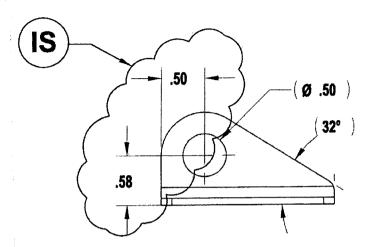
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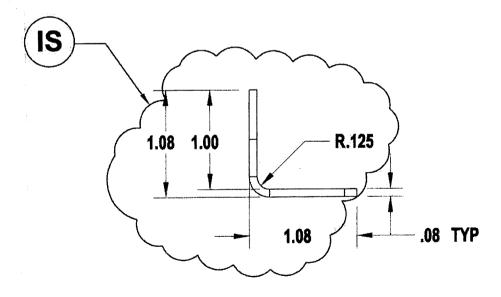
APICAL INDUSTRIES, INC.

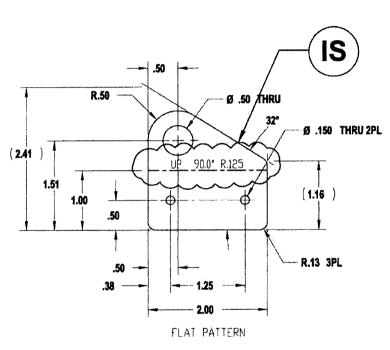
ENGINEERING CHANGE DRDER NO. 03702

SHEET 2 OF 2



SHEET 7, ZONE C4 IS:





SHEET 7, ZONE B7 IS:

SHEET 7, ZONE D1 IS:

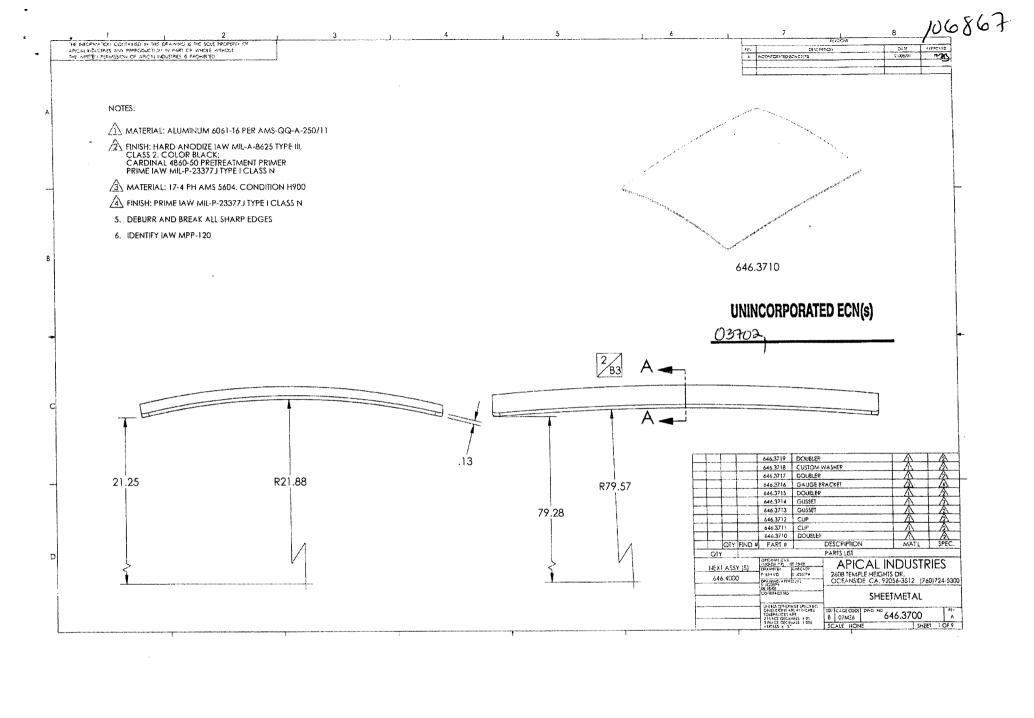
FIN TO PART NUMBER

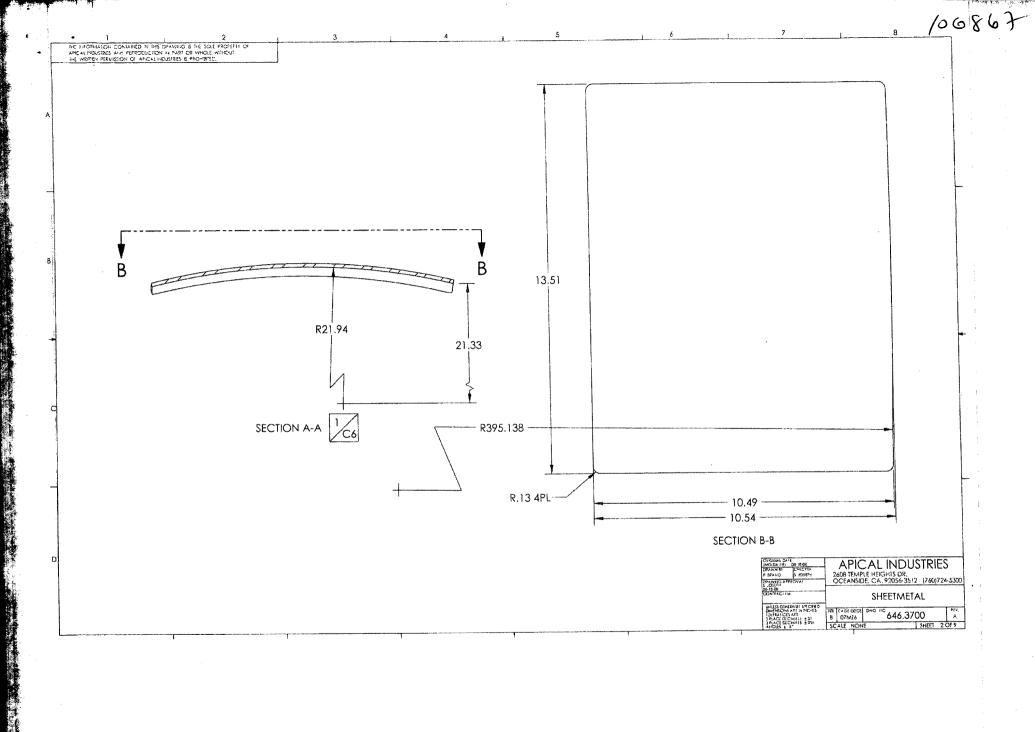
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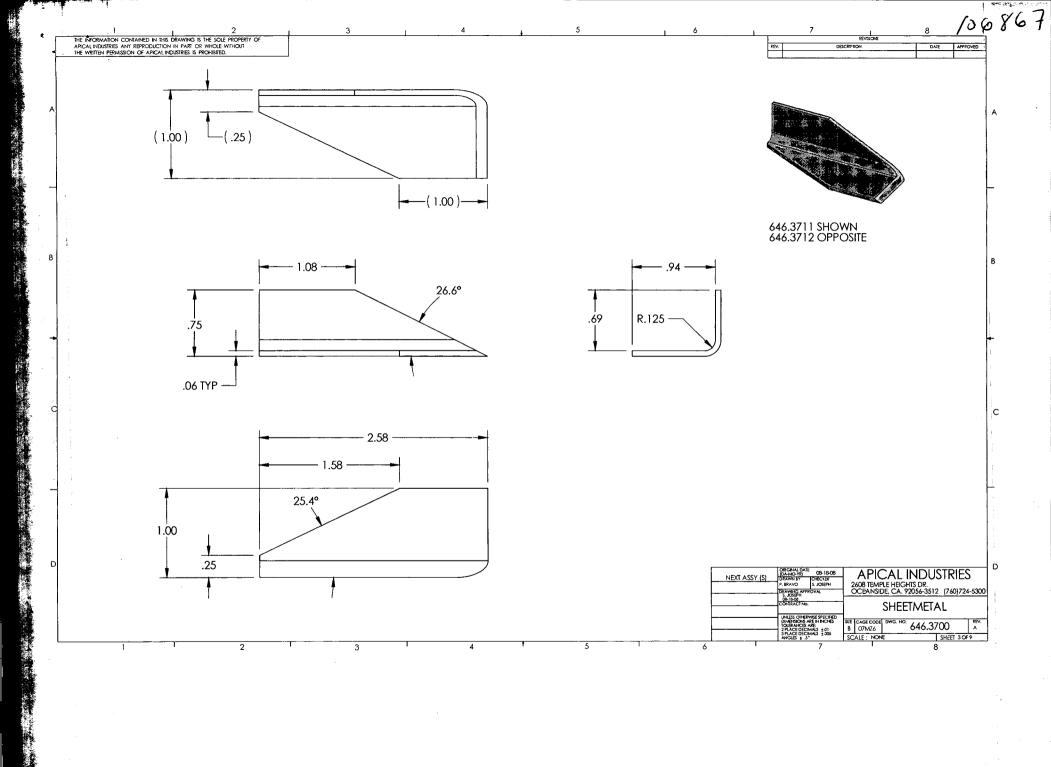
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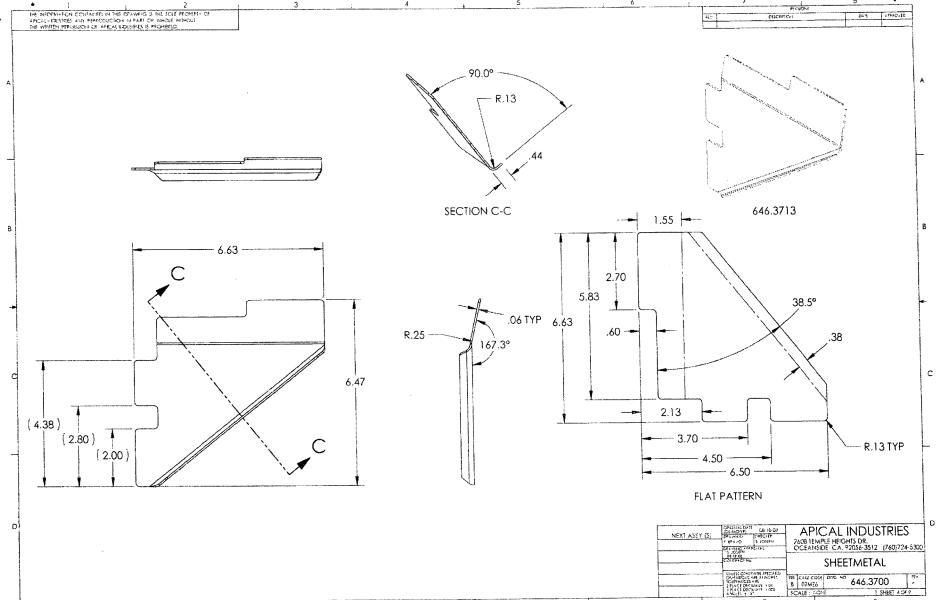
MATERIAL/SPECIFICATION

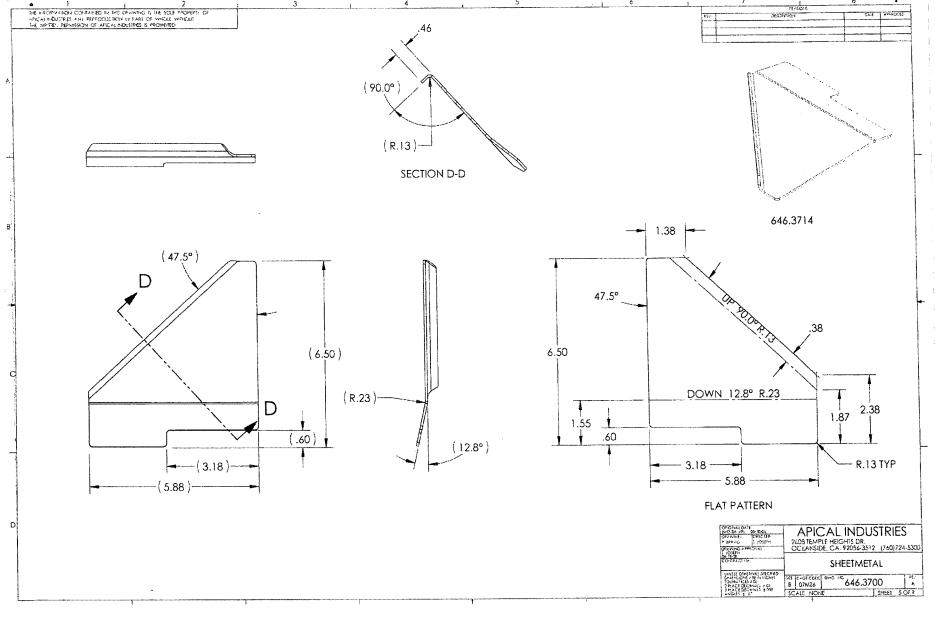
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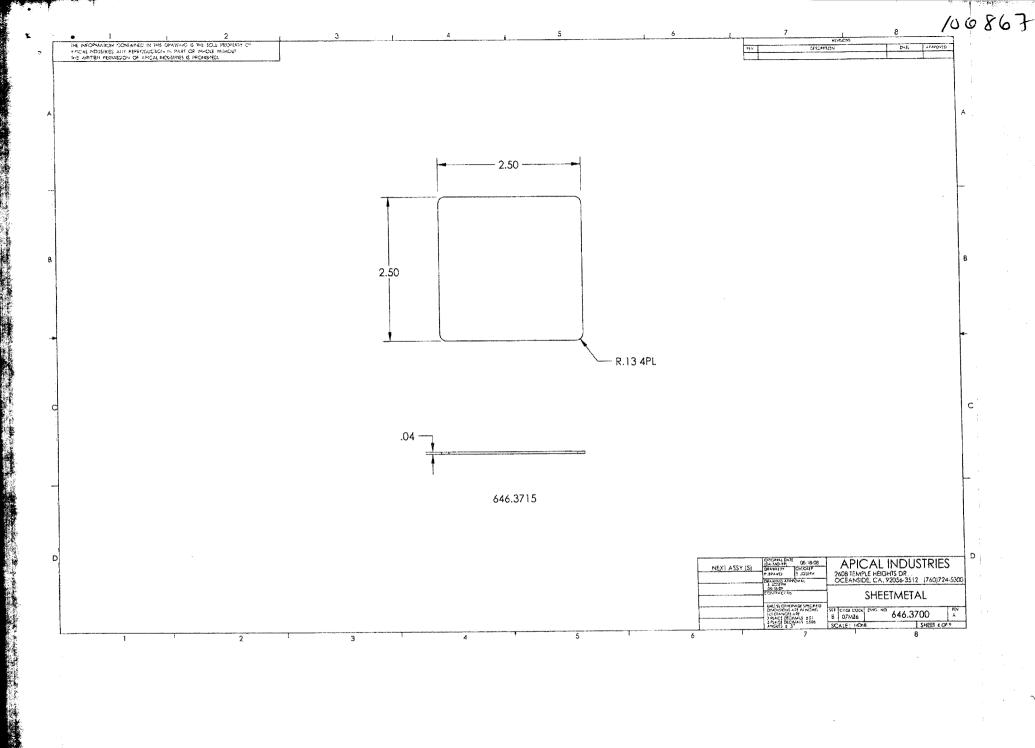


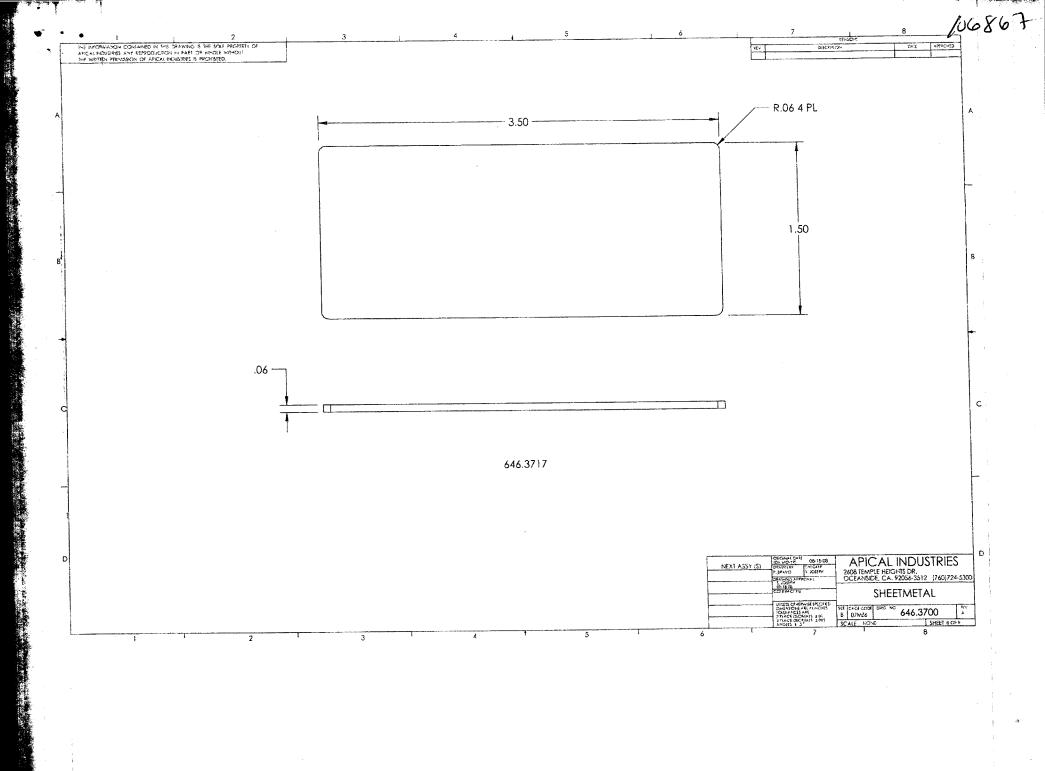


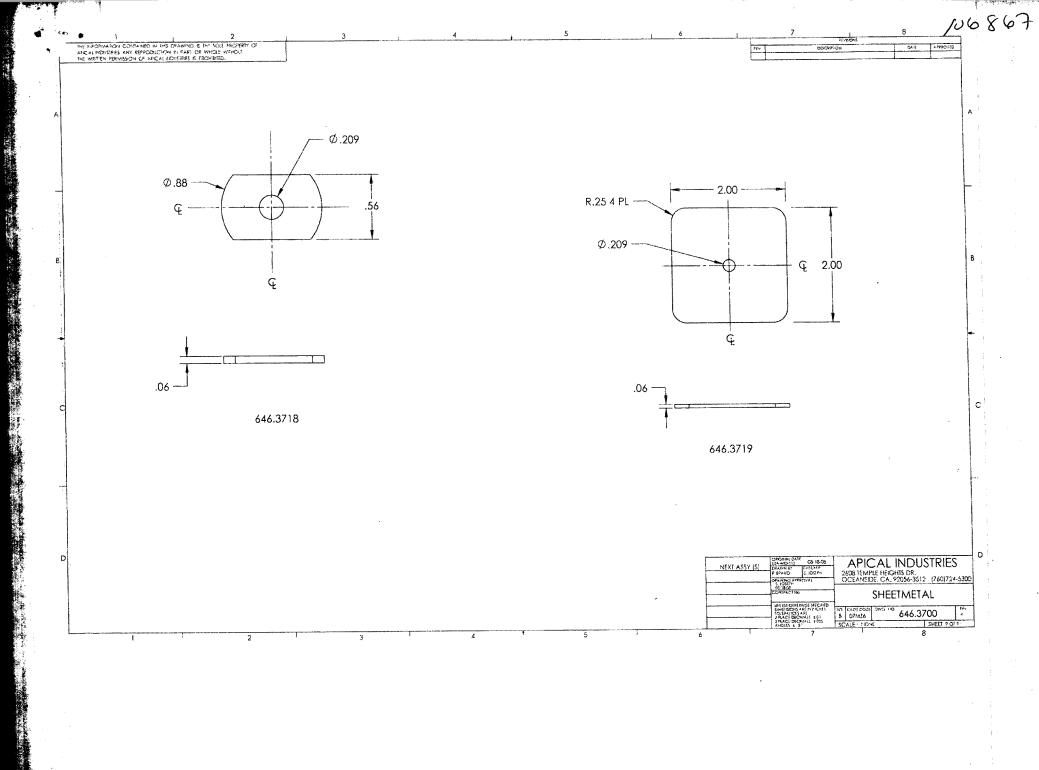














A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62753

Date: 22-Nov-13

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

T		la: 15		
Terms		Ship Via		
Quantity	Description			
1	Part: ASST		Rev:	
lot	10 PCS 646.3312 (12.05) 12 PCS 646.3010 (10.25) 6 PCS 646.3310 (18.10) 2 PCS 645.3110 (10.65) 4 PCS 646.3810 (6.55) 32 PCS 646.3715 (6.70) 38 PCS 646.3718 (3.95) 6 PCS 646.9812 (22.80) HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLAS PRICE IS PER PIECE Job: 20130724	S N PO: 21915	Line:	
	Certificate of Conf. A.T.G. Industries certifies that all items in with all requirements, specifications and ISO 9001 : 2008 REG. ATG SALES-2010 TE. DATE: 22/11/13 CERTIFIED SIGNATURE:	n this shipment are in drawings referenced i ISTERED	conformance n the purchase order.	